Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An electrochemical cell comprising:

a laminated sintered body having a helium leakage rate of 10^{-6} Pa·m^3/s or lower, said laminated sintered body comprising

a planar self-supporting ceramic substrate ~~comprising~~ for a planar solid oxide fuel cell consisting of a ceramic porous body having a thickness of 300 μm or larger and comprising one of an anode and a cathode, said ceramic porous body comprising a material selected from the group consisting of a lanthanum-containing perovskite-type complex oxide, platinum-zirconia cermet, palladium-zirconia cermet, ruthenium-zirconia cermet, nickel-zirconia cermet, platinum-cerium oxide cermet, palladium-cerium oxide cermet, ruthenium-cerium oxide cermet and nickel-cerium oxide cermet, and

a single ceramic dense body having a thickness of 25 μm or smaller directly laminated to contact an entire main surface of said ceramic substrate and comprising a material selected from the group consisting of yttria-stabilized zirconia, yttria partially-stabilized zirconia and cerium oxide; and

a single electrode layer comprising the other one of said anode and said cathode directly laminated on said ceramic dense body of said laminated sintered body so that said ceramic dense body contacts an entire main surface of said electrode layer, said electrode layer comprising a material selected from the group consisting of a lanthanum-containing perovskite-type complex oxide, platinum-zirconia cermet, palladium-zirconia cermet, ruthenium-zirconia cermet, nickel-zirconia cermet, platinum-cerium oxide cermet, palladium-cerium oxide cermet, ruthenium-cerium oxide cermet and nickel-cerium oxide cermet.

2. (Previously Presented) The electrochemical cell of claim 1, wherein said laminated sintered body has an area of 60 cm^2 or larger.

3. (Previously Presented) The electrochemical cell of claim 1, wherein said laminated sintered body is obtained by a method comprising the steps of laminating green bodies for said ceramic porous body and said ceramic dense body to obtain a laminate, pressure molding said laminate by cold isostatic pressing to obtain a pressure molded body, and sintering said pressure molded body.

4-33. (Cancelled).

34. (Previously Presented) A laminated sintered body comprising a conductive interconnector for electrically connecting a plurality of electrochemical cells, said laminated sintered body comprising:

a ceramic substrate comprising a ceramic porous body having a thickness of 300 μm or larger and comprising a material selected from the group consisting of a lanthanum-containing perovskite-type complex oxide, platinum-zirconia cermet, palladium-zirconia cermet, ruthenium-zirconia cermet, nickel-zirconia cermet, platinum-cerium oxide cermet, palladium-cerium oxide cermet, ruthenium-cerium oxide cermet and nickel-cerium oxide cermet; and

a ceramic film provided on said ceramic substrate, said ceramic film comprising a ceramic dense body having a thickness of 25 μm or less and comprising lanthanum chromite;

wherein said laminated sintered body has a helium leakage rate of 10^{-6} $Pa \cdot m^3/s$ or less.